

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) An indirect heating system $[(1)]$ in which a solid fuel circulates in the form of particles, comprising:

$[(including)]$ a grinding station $[(3),]$;

a combustion chamber $[(7),]$;

at least one intermediate silo $[(6),]$;

a separator $[(4)]$; $[(and)]$

at least one cyclone $[(5),]$; and ~~which system is characterized in that~~

a dust extractor $[(10)]$ that intercepts the finest particles which are then introduced into the combustion chamber $[(7)]$ via at least one dedicated pipe $[(52)]$ and burned by at least one dedicated burner $[(71)]$.

2. (currently amended) A heating system according to claim 1, $[(characterized in that)]$ wherein the dedicated burners $[(71)]$ are near $[(the)]$ main burners $[(70)]$.

3. (currently amended) A heating system according to claim 2, $[(characterized in that)]$ wherein each series of said main burners $[(70)]$ has at least two of said dedicated burners $[(71)]$.

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4. (currently amended) An indirect heating system ~~[[(1)]]~~ in which a solid fuel circulates in the form of particles, comprising:

~~[[including]]~~ a grinding station ~~[[(3) ,]]~~ ;

a combustion chamber ~~[[(7) ,]]~~ ;

at least one intermediate silo ~~[[(6) ,]]~~ ;

a separator ~~[[(4) and]]~~ ;

at least one cyclone ~~[[(5) ,]]~~ ; ~~and which system is characterized in that~~

a dust extractor ~~[[(10)]]~~ that intercepts the finest particles which are then introduced into the combustion chamber ~~[[(7)]]~~ via dedicated pipes ~~[[(53)]]~~ and injectors ~~[[(72)]]~~ downstream of ~~[[the]]~~ main burners ~~[[(70)]]~~.

5. (currently amended) A heating system according to claim 4, ~~[[characterized in that]]~~ wherein the finest particles are injected under substoichiometric conditions.

6. (currently amended) A heating system according to ~~[[any preceding]]~~ claim 1, ~~[[characterized in that]]~~ wherein the intercepted particles have a diameter less than 75 microns.

7. (currently amended) A heating system according to ~~[[any preceding]]~~ claim 1, ~~[[characterized in that]]~~ wherein the intercepted particles have a true mass per unit volume from 0.1 kg/dm³ to 0.4 kg/dm³ lower than that of the particles intercepted by the cyclone.

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8. (currently amended) A heating system according to claim [[1]] 2, [[characterized in that]] wherein some of the intercepted particles are introduced into [[the]] injectors [[(72)]] downstream of the burners [[(70, 71)]].

9. (currently amended) A heating system according to [[any preceding]] claim 1, [[characterized in that]] wherein the combustion chamber [[(7)]] is a double vault combustion chamber.

10. (currently amended) A heating system according to [[any of claims]] claim 1 [[to 8]], [[characterized in that]] wherein the combustion chamber [[(7)]] is a front heating combustion chamber.

11. (currently amended) A heating system according to [[any of claims]] claim 1 [[to 8]], [[characterized in that]] wherein the combustion chamber [[(7)]] is a tangential heating combustion chamber.

12. (currently amended) A heating system according to [[any preceding]] claim 1, [[characterized in that]] wherein the solid fuel is non-bituminous coal.